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677 Trends in Human Immunodeficiency Virus Infection among Civilian Applicants for Military Service – United States, October 1985–March 1988

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Current Trends

Trends in Human Immunodeficiency Virus Infection among Civilian Applicants for Military Service – United States, October 1985–March 1988

Since October 1985, the U.S. Department of Defense has routinely tested civilian applicants for military service for serologic evidence of infection with human immunodeficiency virus type 1 (HIV-1).

From October 1985 through March 1988, 1,525,869 recruit applicants were tested; presence of HIV-1 antibody was confirmed by enzyme immunoassay and Western blot in 2152 (1.4 per 1000). During this period, seroprevalence rates based on 6-month intervals decreased from 1.5 to 1.2 per 1000 applicants (Table 1).

Between the first and last intervals, seroprevalence rates showed a statistically significant decrease among male recruit applicants. During the same time period, prevalence of HIV-1 antibody remained unchanged among female applicants (Table 1). Overall, the number of applicants for military service decreased by approximately 12%.

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Editorial Note: Applicants for U.S. military service constitute a geographically diverse group of young, apparently healthy persons who are systematically tested for evidence of HIV-1 infection. The interpretation of seroprevalence trends in this group is complicated by two important considerations. First, social and demographic characteristics of military applicants differ from those of the U.S. civilian population in the same age groups. Males and racial and ethnic minorities are overrepresented among applicants, while certain groups at high risk for HIV-1 infection, including homosexual men and intravenous (IV)-drug users, are subject to exclusion from military service. Second, characteristics of the applicant population have probably changed over time because of increased self-deferral of persons who suspect that they have been exposed to HIV-1.

Seroprevalence among military applicants was reported to be stable after the first 6, 15, and 24 months of testing (*1–4*). However, these data are derived from a series of cross-sectional surveys. Direct measurement of incidence of HIV-1 infection is possible only in cohort studies, which detect new infections in a specified population over time. For example, among several cohorts of homosexual and bisexual men,

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incidence of HIV-1 infection has decreased (*4*). For other groups, such as IV-drug users and heterosexually active persons, comparable data are not available.

The apparent decrease in seroprevalence among military recruit applicants is limited to males. This trend probably reflects increasing self-deferral among high-risk males, as well as other factors. The stable seroprevalence rate among female applicants is consistent with the possibility that women may be less aware of their risk for HIV-1 infection and thus less likely to self-defer. Risk factor information for seropositive recruit applicants will assist in interpreting these observations.

The 50% decline in seroprevalence among white males, who constitute nearly two thirds of recruit applicants, dominates the observed trend for all applicants. Because the dynamics of the HIV-1 epidemic differ among demographic subgroups, it is

TABLE 1. HIV-1–antibody seroprevalence in civilian applicants for military service — United States, October 1985–March 1988

Group	No. tested	No. positive*	Sero-prevalence (per 1000)	Seroprevalence, by 6-month interval					
				10/85–3/86	4/86–9/86	10/86–3/87	4/87–9/87	10/87–3/88	p value†
Total§	**1,525,869**	**2,152**	**1.4**	**1.5**	**1.5**	**1.5**	**1.3**	**1.2**	**<0.001**
Region									
Northeast	259,732	573	2.2	2.4	2.4	2.3	2.0	1.8	<0.05
North Central	401,543	298	0.7	0.8	0.7	0.8	0.8	0.5	NS
South	558,106	868	1.6	1.6	1.8	1.6	1.3	1.5	NS
West	289,990	339	1.2	1.4	1.2	1.2	1.2	0.8	<0.01
U.S. territories	13,486	74	5.5	7.3	4.6	8.4	3.0	3.5	NS
Age group (yrs)									
17–19	796,851	307	0.4	0.4	0.4	0.3	0.4	0.3	<0.05
20–24	470,577	869	1.8	1.8	2.0	2.0	1.8	1.5	NS
25–29	150,768	601	4.0	4.6	4.0	4.1	3.2	3.8	<0.05
≥30	107,673	375	3.5	4.3	3.2	3.8	3.0	3.3	NS
Males									
All¶	1,314,646	2,008	1.5	1.7	1.7	1.6	1.4	1.2	<0.001
Black	228,142	1,024	4.5	4.6	5.1	5.1	3.6	4.0	<0.01
Hispanic	63,488	144	2.3	2.4	2.0	3.1	2.0	1.8	NS
White	978,519	753	0.8	1.0	0.8	0.7	0.8	0.5	<0.001
Females									
All¶	211,222	144	0.7	0.7	0.7	0.6	0.7	0.8	NS
Black	58,220	96	1.6	1.6	1.4	1.8	1.6	2.0	NS
Hispanic	7,781	4	0.5	**	**	**	**	**	**
White	138,219	39	0.3	0.3	0.3	0.1	0.4	0.3	NS

*Repeatedly reactive enzyme immunoassay confirmed by Western blot.
†Chi-square test for trend; NS indicates p>0.05.
§Includes 3012 applicants from regions other than those shown and 1 applicant with sex unknown (all seronegative).
¶Includes groups other than black, white, or Hispanic.
**Insufficient data.

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important to monitor subgroup-specific trends in seroprevalence among military applicants (*5,6*). These data will permit comparisons with those from other screened volunteer populations (e.g., blood donors and Job Corps entrants), as well as from surveys of populations less subject to self-selection biases (e.g., hospital patients and childbearing women) (*7,8*).

References

1. CDC. Human T-lymphotropic virus type III/lymphadenopathy-associated virus antibody prevalence in U.S. military recruit applicants. MMWR 1986;35:421–4.
2. Burke DS, Brundage JF, Herbold JR, et al. Human immunodeficiency virus infections among civilian applicants for United States military service, October 1985 to March 1986: demographic factors associated with seropositivity. N Engl J Med 1987;317:131–6.
3. CDC. Trends in human immunodeficiency virus infection among civilian applicants for military service—United States, October 1985–December 1986. MMWR 1987;36:273–6.
4. CDC. Human immunodeficiency virus infection in the United States: a review of current knowledge. MMWR 1987;36(suppl S-6).
5. Brundage JF, Burke DS, Gardner LI, Visintine R, Peterson M, Redfield RR. HIV infection among young adults in the New York City area: prevalence and incidence estimates based on antibody screening among civilian applicants for military service. NY State J Med 1988; 88:232–5.
6. Gardner LI, Brundage J, McNeil J, Burke D, Miller R. Race specific trend analyses of HIV antibody prevalence in the United States [Abstract]. IV International Conference on AIDS. Book 2. Stockholm, June 12–16, 1988:221.
7. CDC. Quarterly report to the Domestic Policy Council on the prevalence and rate of spread of HIV and AIDS in the United States. MMWR 1988;37:223–6.
8. Hoff R, Berardi VP, Weiblen BJ, Mahoney-Trout L, Mitchell ML, Grady GF. Seroprevalence of human immunodeficiency virus among childbearing women: estimation by testing samples of blood from newborns. N Engl J Med 1988;318:525–30.

Renal Agenesis Surveillance – United States

Based on data from the Birth Defects Monitoring Program (BDMP)*, since 1970, the reported prevalence of kidney defects coded under the International Classification of Diseases (ICD) code 753.0 has increased threefold in the United States (Figure 1). To determine whether this reflected a true increase or resulted from a change in detection or reporting practices, CDC evaluated information about cases from 590 (88%) of 674 hospitals reporting to the BDMP at least one newborn with a kidney defect coded as 753.0 from 1970 through 1983. During 1970–1978, this code was classified only as renal agenesis—the congenital absence of one (unilateral) or both (bilateral) kidneys—and during 1979–1983, as renal agenesis and dysgenesis (abnormal kidney formation). This evaluation showed that the increase in reported cases of renal agenesis actually reflected changes in reporting of other renal anomalies. These findings have implications for surveillance of birth defects and suggest that differences may exist between actual clinical diagnoses and the coding of these medical conditions.

Newborns with bilateral renal agenesis have low-set, floppy ears, a broad, flat nose, and underdeveloped lungs. These newborns often die of respiratory failure

*The BDMP, initiated by CDC in 1974, is a surveillance system for monitoring birth defects in newborns. The system comprises two data bases: the Commission on Professional and Hospital Activities (CPHA), which contains data since 1970, and the McDonnell Douglas Health Information System (MDHIS), which has data available since 1982.

Renal Agenesis — Continued

within a few hours of birth. Lungs of infants with at least one functional kidney usually develop normally; thus, unilateral renal agenesis is often not detected during the perinatal period.

The cases in this evaluation included 1404 newborns with an ICD code of 753.0. Participating hospitals provided copies of the discharge summary, pathology reports, and x-ray reports. For 966 (69%) of the infants, hospital reports supported the diagnosis of renal agenesis or renal dysgenesis. Of these, 468 (48%) had bilateral renal agenesis, 105 (11%) had one agenic and one dysgenic kidney, 229 (24%) had bilateral renal dysgenesis, 136 (14%) had unilateral renal agenesis, and 28 (3%) had unilateral renal dysgenesis.

For the 14-year period 1970–1983, clinical reports of anomalies coded to 753.0 showed the following trends: 1) the annual frequency of bilateral renal agenesis varied considerably but appeared to increase slowly; 2) the prevalence at birth of one

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TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	44th Week Ending			Cumulative, 44th Week Ending		
	Nov. 5, 1988	Nov. 7, 1987	Median 1983-1987	Nov. 5, 1988	Nov. 7, 1987	Median 1983-1987
Acquired Immunodeficiency Syndrome (AIDS)	1,019	U*	167	26,180	16,492	6,644
Aseptic meningitis	168	226	279	5,597	9,833	9,132
Encephalitis: Primary (arthropod-borne & unspec)	10	38	38	654	1,129	1,118
Post-infectious	-	-	2	108	89	92
Gonorrhea: Civilian	13,455	13,606	17,568	587,497	655,050	753,158
Military	271	209	295	9,886	13,556	17,867
Hepatitis: Type A	618	378	474	21,564	20,743	19,221
Type B	398	434	553	18,890	21,399	21,861
Non A, Non B	50	46	87	2,142	2,531	3,021
Unspecified	49	50	120	1,913	2,644	4,308
Legionellosis	13	14	24	795	817	643
Leprosy	3	-	5	136	175	205
Malaria	30	6	17	849	778	850
Measles: Total†	27	16	16	2,468	3,503	2,606
Indigenous	17	15	15	2,207	3,086	2,178
Imported	10	1	3	261	417	302
Meningococcal infections	57	58	50	2,399	2,464	2,284
Mumps	38	102	66	3,911	11,213	2,809
Pertussis	43	44	44	2,368	2,155	2,155
Rubella (German measles)	1	2	6	184	318	583
Syphilis (Primary & Secondary): Civilian	728	590	590	34,177	29,989	23,618
Military	3	6	6	137	141	143
Toxic Shock syndrome	4	3	7	296	296	321
Tuberculosis	422	407	407	17,922	17,949	18,024
Tularemia	4	2	3	165	178	178
Typhoid Fever	5	9	6	322	285	307
Typhus fever, tick-borne (RMSF)	7	8	10	588	571	712
Rabies, animal	72	77	101	3,657	4,063	4,654

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1988		Cum. 1988
Anthrax	-	Leptospirosis (Hawaii 1)	41
Botulism: Foodborne (Calif. 1)	23	Plague	14
Infant (Conn. 1)	30	Poliomyelitis, Paralytic	1
Other	3	Psittacosis	77
Brucellosis (Ohio 1, Mo. 1, Tex. 1)	57	Rabies, human	-
Cholera (Ga. 1, Calif. 1)	6	Tetanus (Upst. N.Y. 1, Fla. 1, La. 1)	48
Congenital rubella syndrome	4	Trichinosis (Upst. N.Y. 1)	39
Congenital syphilis, ages < 1 year	302		
Diphtheria	-		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†One of the 27 reported cases for this week was imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending November 5, 1988 and November 7, 1987 (44th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988
UNITED STATES	26,180	5,587	654	108	587,497	655,050	21,564	18,890	2,142	1,913	795	136
NEW ENGLAND	1,055	366	24	4	18,493	20,206	721	1,005	109	79	46	15
Maine	26	19	2	-	345	584	18	48	5	1	4	-
N.H.	34	38	1	3	226	343	40	64	9	4	4	-
Vt.	10	24	7	-	102	196	14	34	6	4	3	-
Mass.	584	147	8	1	6,233	7,089	344	628	71	55	32	14
R.I.	68	77	-	-	1,715	1,852	78	71	10	-	3	1
Conn.	333	51	6	-	9,872	10,142	227	160	8	15	-	-
MID. ATLANTIC	8,743	611	52	4	92,778	102,600	1,573	2,700	161	266	191	8
Upstate N.Y.	1,123	335	33	1	13,484	14,941	657	657	63	19	74	-
N.Y. City	4,847	117	8	3	36,890	54,077	304	1,134	16	198	40	7
N.J.	2,055	61	11	-	13,254	13,994	331	620	56	35	40	1
Pa.	718	98	-	-	27,150	19,588	281	289	26	14	37	-
E.N. CENTRAL	1,878	925	163	13	99,345	100,517	1,428	2,006	191	104	180	4
Ohio	411	337	55	3	22,640	22,548	290	459	30	17	70	-
Ind.	80	89	18	-	7,321	8,066	142	286	19	20	20	-
Ill.	896	87	32	10	29,971	29,372	439	438	67	27	-	3
Mich.	399	367	42	-	31,854	31,773	352	593	51	37	54	-
Wis.	92	45	16	-	7,559	8,756	205	230	24	3	36	1
W.N. CENTRAL	628	236	48	11	24,867	26,678	1,200	866	94	31	65	1
Minn.	134	29	11	3	3,404	3,994	89	116	19	3	3	-
Iowa	37	35	9	3	1,858	2,567	43	77	13	2	16	-
Mo.	328	97	1	-	14,232	14,071	724	512	43	16	17	-
N. Dak.	4	5	4	-	145	254	6	11	3	5	1	-
S. Dak.	7	18	5	2	432	527	15	4	2	-	14	-
Nebr.	33	11	10	2	1,367	1,733	48	40	2	-	5	-
Kans.	85	41	8	1	3,429	3,532	277	106	12	5	9	1
S. ATLANTIC	4,626	1,195	88	40	165,897	172,430	2,028	3,896	331	288	122	1
Del.	62	39	3	-	2,597	2,910	44	125	7	4	13	-
Md.	497	174	8	3	17,406	19,548	252	582	38	24	17	1
D.C.	420	17	1	1	12,445	11,541	16	38	3	1	1	-
Va.	328	150	32	4	12,086	12,680	328	270	66	194	10	-
W. Va.	16	34	22	-	1,166	1,241	14	62	4	3	-	-
N.C.	248	147	21	-	23,013	25,282	278	707	78	-	31	-
S.C.	152	21	-	1	13,198	13,594	39	456	11	5	22	-
Ga.	620	137	1	2	31,430	30,788	535	543	13	6	18	-
Fla.	2,283	476	10	29	52,556	54,846	524	1,103	110	51	10	-
E.S. CENTRAL	667	378	59	8	47,217	49,527	683	1,221	162	14	46	2
Ky.	85	129	19	1	4,786	4,966	453	242	56	2	19	-
Tenn.	283	46	15	-	16,227	17,386	148	549	39	-	8	-
Ala.	180	153	25	2	14,295	15,720	49	318	57	11	13	2
Miss.	99	50	-	5	11,909	11,451	32	112	10	1	6	-
W.S. CENTRAL	2,295	685	76	3	63,513	74,258	2,643	1,746	185	471	21	29
Ark.	75	14	5	-	6,326	8,424	301	94	4	17	4	-
La.	318	108	22	1	12,504	12,801	132	313	25	16	6	1
Okla.	100	63	5	-	6,013	8,072	436	152	41	25	11	-
Tex.	1,802	500	44	2	38,670	44,961	1,774	1,187	115	413	-	27
MOUNTAIN	762	202	26	3	12,636	17,245	2,870	1,395	224	155	41	1
Mont.	11	4	-	-	364	482	36	49	10	4	2	-
Idaho	9	1	-	-	291	607	122	97	7	4	-	-
Wyo.	6	2	-	-	178	378	5	12	3	-	3	-
Colo.	282	68	3	-	2,744	3,896	194	173	63	70	8	1
N. Mex.	41	21	3	1	1,255	1,893	477	208	18	1	4	-
Ariz.	245	65	11	1	4,651	5,782	1,572	551	66	49	16	-
Utah	55	24	4	1	457	528	261	106	36	18	3	-
Nev.	113	17	5	-	2,696	3,669	303	199	21	9	5	-
PACIFIC	5,536	1,009	108	22	62,751	91,589	8,418	4,055	685	505	83	76
Wash.	342	-	7	4	5,752	7,629	1,917	724	169	60	19	6
Oreg.	155	-	-	-	2,704	3,451	1,152	497	73	21	1	1
Calif.	4,926	891	96	18	52,866	78,359	4,845	2,734	432	413	60	57
Alaska	16	23	3	-	902	1,428	492	50	6	6	-	1
Hawaii	97	95	2	-	527	722	12	50	5	5	3	11
Guam	1	-	-	-	122	175	9	13	-	2	1	5
P.R.	1,200	67	4	1	1,122	1,705	50	233	40	39	-	3
V.I.	32	-	-	-	353	240	1	6	2	-	-	-
Amer. Samoa	-	-	-	-	65	70	3	2	-	5	-	2
C.N.M.I.	-	-	-	-	39	-	1	3	-	4	-	1

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending November 5, 1988 and November 7, 1987 (44th Week)

Reporting Area	Malaria	Measles (Rubeola)					Meningococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1988	1988	Cum. 1988	1988	Cum. 1988	Cum. 1987	Cum. 1988	1988	Cum. 1988	1988	Cum. 1988	Cum. 1987	1988	Cum. 1988	Cum. 1987
UNITED STATES	849	17	2,207	10	261	3,503	2,399	38	3,911	43	2,368	2,155	1	184	318
NEW ENGLAND	66	-	83	-	52	280	206	-	118	2	161	148	-	9	1
Maine	3	-	7	-	-	3	9	-	-	-	13	28	-	-	1
N.H.	3	-	67	-	44	162	23	-	106	-	47	37	-	5	-
Vt.	4	-	-	-	-	26	15	-	5	-	4	4	-	-	-
Mass.	33	-	2	-	2	65	91	-	7	-	60	50	-	3	-
R.I.	6	-	-	-	-	2	21	-	-	-	15	3	-	1	-
Conn.	17	-	7	-	6	22	47	-	-	2	22	26	-	-	-
MID. ATLANTIC	148	-	811	1	49	582	250	1	324	3	175	255	-	14	12
Upstate N.Y.	36	-	19	-	18	40	118	1	96	3	103	151	-	2	10
N.Y. City	79	-	46	1†	6	463	59	-	101	-	5	8	-	7	1
N.J.	11	-	217	-	11	39	63	-	44	-	8	16	-	3	1
Pa.	22	-	529	-	14	40	10	-	83	-	59	80	-	2	-
E.N. CENTRAL	43	-	139	9	57	365	335	8	793	1	233	244	1	31	38
Ohio	10	-	2	9§	32	6	120	-	113	-	49	68	-	1	-
Ind.	3	-	57	-	-	-	26	-	72	-	72	16	-	-	-
Ill.	2	-	56	-	16	186	70	4	282	1	44	16	1	26	27
Mich.	23	-	24	-	5	29	79	4	206	-	34	46	-	4	9
Wis.	5	-	-	-	4	144	40	-	110	-	34	98	-	-	2
W.N. CENTRAL	17	-	11	-	2	230	87	4	137	-	121	129	-	2	2
Minn.	5	-	10	-	1	39	19	-	-	-	49	13	-	-	-
Iowa	2	-	-	-	-	-	-	1	34	-	29	55	-	-	1
Mo.	6	-	1	-	1	189	32	2	36	-	20	31	-	-	-
N. Dak.	-	-	-	-	-	1	-	-	-	-	11	12	-	-	-
S. Dak.	-	-	-	-	-	-	4	-	1	-	6	3	-	-	-
Nebr.	1	-	-	-	-	-	12	-	11	-	-	1	-	-	-
Kans.	3	-	-	-	-	1	20	1	55	-	7	14	-	2	1
S. ATLANTIC	110	-	374	-	20	159	414	2	643	11	234	294	-	17	18
Del.	1	-	-	-	-	32	2	-	-	-	7	5	-	-	2
Md.	17	-	11	-	3	7	49	-	129	7	44	17	-	1	3
D.C.	12	-	-	-	-	1	8	-	249	-	1	-	-	-	1
Va.	18	-	198	-	2	1	45	-	134	-	21	50	-	11	1
W. Va.	3	-	6	-	-	-	7	-	15	-	8	39	-	-	-
N.C.	13	-	-	-	5	5	66	1	51	3	65	117	-	-	1
S.C.	10	-	-	-	-	2	35	1	6	-	1	-	-	-	-
Ga.	5	-	-	-	-	9	64	-	28	-	35	23	-	2	2
Fla.	31	-	159	-	10	102	138	-	31	1	52	43	-	3	8
E.S. CENTRAL	18	-	60	-	-	6	221	3	437	1	98	44	-	2	3
Ky.	-	-	35	-	-	-	49	-	208	-	12	2	-	-	2
Tenn.	-	-	1	-	-	-	123	2	211	-	29	13	-	2	1
Ala.	10	-	-	-	-	4	35	1	15	1	53	22	-	-	-
Miss.	8	-	24	-	-	2	14	N	N	-	4	7	-	-	-
W.S. CENTRAL	74	-	14	-	3	448	161	6	760	1	199	260	-	11	11
Ark.	4	-	-	-	1	-	20	-	99	1	23	12	-	4	2
La.	11	-	-	-	-	-	47	2	283	-	17	48	-	-	-
Okla.	10	-	8	-	-	4	18	-	196	-	61	140	-	1	5
Tex.	49	-	6	-	2	444	76	4	182	-	98	51	-	6	4
MOUNTAIN	40	-	117	-	32	496	68	4	191	15	697	186	-	6	24
Mont.	5	-	5	-	30	128	2	-	2	-	2	6	-	-	8
Idaho	2	-	-	-	1	-	8	1	4	4	314	62	-	-	1
Wyo.	-	-	-	-	-	2	-	-	3	-	2	5	-	-	1
Colo.	14	-	112	-	1	9	18	-	31	-	29	61	-	2	-
N. Mex.	2	-	-	-	-	317	11	N	N	-	51	11	-	-	-
Ariz.	11	-	-	-	-	36	18	2	129	11	272	33	-	-	4
Utah	4	-	-	-	-	1	9	-	7	-	26	8	-	3	10
Nev.	2	-	-	-	-	3	2	1	15	-	1	-	-	1	-
PACIFIC	333	17	508	-	46	937	657	10	508	9	450	595	-	92	209
Wash.	20	-	7	-	-	44	61	1	50	-	105	91	-	-	2
Oreg.	13	-	6	-	2	97	39	N	N	-	45	70	-	-	2
Calif.	287	17	581	-	36	791	534	9	418	9	245	209	-	64	133
Alaska	3	-	1	-	-	1	6	-	13	-	7	6	-	-	2
Hawaii	10	-	3	-	8	4	17	-	16	-	48	219	-	28	70
Guam	-	-	-	-	1	2	-	-	2	-	-	-	-	1	1
P.R.	2	-	190	-	-	763	9	-	9	-	15	16	-	3	3
V.I.	-	-	-	-	-	-	-	-	31	-	-	-	-	-	1
Amer. Samoa	-	-	-	-	-	1	2	-	3	-	-	-	-	-	-
C.N.M.I.	1	-	-	-	-	-	1	-	2	-	-	-	-	-	-

*For measles only, imported cases includes both out-of-state and international importations.
N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending November 5, 1988 and November 7, 1987 (44th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988
UNITED STATES	34,177	29,989	296	17,922	17,949	165	322	588	3,957
NEW ENGLAND	981	534	21	468	542	4	33	12	15
Maine	12	1	4	22	22	-	-	-	1
N.H.	6	3	4	8	18	-	-	-	5
Vt.	3	2	2	4	12	-	1	-	-
Mass.	366	254	9	273	302	3	20	7	-
R.I.	30	10	-	36	52	-	5	2	-
Conn.	574	264	2	125	136	1	7	3	9
MID. ATLANTIC	8,235	5,814	46	3,637	3,206	-	65	18	399
Upstate N.Y.	501	221	21	476	427	-	13	11	43
N.Y. City	5,771	4,171	6	2,023	1,542	-	39	6	-
N.J.	811	597	3	548	574	-	11	-	13
Pa.	1,152	825	15	590	663	-	2	1	343
E.N. CENTRAL	1,006	767	43	1,986	1,999	1	29	42	135
Ohio	89	90	29	380	365	-	7	30	5
Ind.	47	53	1	197	196	-	2	2	28
Ill.	459	401	1	858	894	-	14	7	29
Mich.	395	170	12	460	457	1	4	2	34
Wis.	26	53	-	91	87	-	2	1	39
W.N. CENTRAL	205	157	40	452	513	74	4	90	405
Minn.	17	17	5	76	99	3	2	2	116
Iowa	20	25	7	49	35	-	-	-	13
Mo.	133	72	10	221	279	45	2	54	20
N. Dak.	1	1	3	15	10	1	-	-	95
S. Dak.	-	11	4	31	23	18	-	7	112
Nebr.	28	11	4	13	24	2	-	1	17
Kans.	6	20	7	47	43	7	-	26	32
S. ATLANTIC	12,158	10,340	18	3,792	3,844	5	35	197	1,249
Del.	91	84	1	36	36	2	-	1	55
Md.	593	535	3	384	334	-	2	22	285
D.C.	598	340	-	169	135	-	1	-	8
Va.	368	279	-	351	376	2	12	17	309
W. Va.	35	12	-	66	85	-	1	2	87
N.C.	693	606	8	409	448	-	1	107	8
S.C.	639	645	3	404	395	-	-	22	110
Ga.	2,172	1,441	-	615	678	1	5	23	257
Fla.	6,969	6,418	3	1,378	1,357	-	13	3	130
E.S. CENTRAL	1,695	1,630	23	1,482	1,609	11	3	84	264
Ky.	56	20	9	316	371	5	1	29	107
Tenn.	735	639	10	452	468	5	-	37	69
Ala.	484	428	3	446	473	-	1	9	83
Miss.	420	543	1	268	297	1	1	9	5
W.S. CENTRAL	3,708	3,754	28	2,282	2,104	51	8	129	477
Ark.	204	221	2	259	256	32	-	25	79
La.	725	691	-	285	235	-	4	2	10
Okla.	131	150	9	209	202	16	-	87	30
Tex.	2,648	2,692	17	1,529	1,411	3	4	15	358
MOUNTAIN	728	601	35	478	540	11	9	11	335
Mont.	3	9	-	19	13	-	1	6	184
Idaho	3	5	5	19	28	-	-	1	11
Wyo.	1	3	-	5	2	2	-	3	37
Colo.	88	106	3	57	133	5	3	1	28
N. Mex.	46	50	2	89	85	2	1	-	11
Ariz.	142	264	16	206	226	1	4	-	39
Utah	14	22	9	29	24	1	-	-	9
Nev.	431	142	-	54	29	-	-	-	16
PACIFIC	5,451	6,592	43	3,345	3,592	8	136	5	378
Wash.	178	133	6	192	208	1	13	1	-
Oreg.	258	260	1	128	103	1	7	1	-
Calif.	4,974	6,182	35	2,850	3,057	4	113	3	366
Alaska	14	4	-	40	52	2	-	-	12
Hawaii	27	13	1	135	172	-	3	-	-
Guam	3	2	-	21	26	-	-	-	-
P.R.	589	804	-	194	265	-	5	-	62
V.I.	1	9	-	6	2	-	-	-	-
Amer. Samoa	-	-	-	3	8	-	1	-	-
C.N.M.I.	1	-	-	17	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending November 5, 1988 (44th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	>65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	662	454	118	54	13	23	38
Boston, Mass.	160	96	36	16	5	7	15
Bridgeport, Conn.	45	32	10	1	-	2	-
Cambridge, Mass.	17	14	2	1	-	-	1
Fall River, Mass.	32	25	6	1	-	-	-
Hartford, Conn.	78	40	17	14	2	5	2
Lowell, Mass.	24	20	1	2	-	1	1
Lynn, Mass.	14	12	2	-	-	-	-
New Bedford, Mass.	27	20	5	1	1	-	2
New Haven, Conn.	51	36	6	5	2	2	5
Providence, R.I.	48	34	6	5	-	3	-
Somerville, Mass.	6	7	1	-	-	-	1
Springfield, Mass.	51	33	13	2	2	1	5
Waterbury, Conn.	38	32	3	3	-	-	4
Worcester, Mass.	69	53	10	3	1	2	2
MID. ATLANTIC	2,732	1,835	514	243	69	68	154
Albany, N.Y.	52	36	9	3	2	2	1
Allentown, Pa.	21	15	4	-	2	-	-
Buffalo, N.Y.	125	91	20	8	4	2	13
Camden, N.J.	46	30	10	3	1	2	3
Elizabeth, N.J.	22	15	6	-	-	1	-
Erie, Pa.†	59	46	9	1	2	1	8
Jersey City, N.J.	66	46	9	6	2	3	1
N.Y. City, N.Y.	1,325	842	263	161	37	22	52
Newark, N.J.	68	33	12	14	5	2	7
Paterson, N.J.	32	21	4	1	-	6	2
Philadelphia, Pa.	388	249	67	26	10	16	21
Pittsburgh, Pa.†	79	53	18	4	1	3	4
Reading, Pa.	33	27	5	1	-	-	6
Rochester, N.Y.	117	94	16	5	-	2	13
Schenectady, N.Y.	55	47	5	2	1	-	3
Scranton, Pa.†	25	21	2	-	1	1	2
Syracuse, N.Y.	117	92	18	4	-	3	12
Trenton, N.J.	49	32	12	2	-	3	4
Utica, N.Y.	31	24	4	2	1	-	-
Yonkers, N.Y.	22	21	1	-	-	-	2
E.N. CENTRAL	2,239	1,501	488	151	49	71	98
Akron, Ohio	63	52	6	2	1	2	-
Canton, Ohio	22	16	5	1	-	-	1
Chicago, Ill.§	564	362	125	45	10	22	18
Cincinnati, Ohio	141	95	26	11	1	8	16
Cleveland, Ohio	174	105	45	13	5	6	3
Columbus, Ohio	84	57	18	6	1	2	-
Dayton, Ohio	142	103	24	7	3	5	4
Detroit, Mich.	260	148	55	28	13	16	5
Evansville, Ind.	20	13	6	1	-	-	1
Fort Wayne, Ind.	60	41	16	3	-	-	6
Gary, Ind.	18	11	7	-	-	-	-
Grand Rapids, Mich.	48	35	9	2	2	-	4
Indianapolis, Ind.	156	113	30	8	1	4	5
Madison, Wis.	35	23	6	2	3	-	5
Milwaukee, Wis.	154	116	25	8	3	2	11
Peoria, Ill.	47	37	8	1	-	1	3
Rockford, Ill.	40	26	9	2	2	1	4
South Bend, Ind.	28	23	3	1	1	-	2
Toledo, Ohio	114	71	32	7	2	2	11
Youngstown, Ohio	69	54	11	3	1	-	1
W.N. CENTRAL	894	635	148	55	27	31	30
Des Moines, Iowa	74	57	12	2	2	1	3
Duluth, Minn.	25	22	1	1	-	1	-
Kansas City, Kans.	38	24	11	1	1	1	-
Kansas City, Mo.	104	77	16	7	3	1	6
Lincoln, Nebr.	31	21	4	2	1	3	-
Minneapolis, Minn.	246	169	39	21	5	12	12
Omaha, Nebr.	108	71	22	4	5	6	5
St. Louis, Mo.	143	98	18	14	9	4	-
St. Paul, Minn.	54	42	9	2	-	1	1
Wichita, Kans.§	71	54	14	1	1	1	3

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	>65	45-64	25-44	1-24	<1	Total
S. ATLANTIC	1,379	845	291	146	44	52	49
Atlanta, Ga.	158	91	30	24	6	7	3
Baltimore, Md.	319	200	70	28	11	10	14
Charlotte, N.C.	86	50	27	5	2	2	10
Jacksonville, Fla.	142	86	40	9	4	3	1
Miami, Fla.	107	50	21	26	4	6	-
Norfolk, Va.	57	32	13	4	1	7	1
Richmond, Va.	92	57	22	7	4	2	7
Savannah, Ga.	51	37	5	7	1	1	2
St. Petersburg, Fla.	66	52	6	2	1	5	-
Tampa, Fla.	73	49	11	4	5	3	7
Washington, D.C.	193	112	43	27	5	6	2
Wilmington, Del.	35	29	3	3	-	-	2
E.S. CENTRAL	773	482	174	59	30	28	48
Birmingham, Ala.	121	76	22	9	5	9	3
Chattanooga, Tenn.	64	45	14	4	1	-	7
Knoxville, Tenn.	96	65	19	4	4	4	12
Louisville, Ky.	91	57	22	5	2	5	6
Memphis, Tenn.	161	96	36	13	11	5	12
Mobile, Ala.	48	28	7	9	1	3	-
Montgomery, Ala.	44	33	9	1	1	-	3
Nashville, Tenn.	148	82	45	14	5	2	5
W.S. CENTRAL	1,654	1,022	366	157	55	53	50
Austin, Tex.	51	33	10	6	1	1	3
Baton Rouge, La.	33	20	5	6	1	1	1
Corpus Christi, Tex.§	48	37	10	1	-	-	1
Dallas, Tex.	199	118	37	27	6	11	1
El Paso, Tex.	65	43	14	1	4	3	2
Fort Worth, Tex	83	55	18	5	1	4	6
Houston, Tex.§	735	437	169	89	24	16	18
Little Rock, Ark.	88	52	22	3	3	5	4
New Orleans, La.	68	35	20	7	5	1	-
San Antonio, Tex.	156	107	32	6	4	7	7
Shreveport, La.	43	27	7	4	5	-	3
Tulsa, Okla.	87	58	22	2	1	4	4
MOUNTAIN	700	451	126	58	35	29	33
Albuquerque, N. Mex.	83	58	9	11	14	1	4
Colo. Springs, Colo.	42	24	10	4	2	1	6
Denver, Colo.	128	92	19	7	4	6	5
Las Vegas, Nev.	115	75	24	9	4	3	7
Ogden, Utah	16	12	2	1	1	-	2
Phoenix, Ariz.	134	75	28	16	5	10	2
Pueblo, Colo.	29	23	5	-	-	-	3
Salt Lake City, Utah	32	18	7	2	2	3	-
Tucson, Ariz.	112	74	22	8	3	5	4
PACIFIC	1,818	1,152	348	202	64	46	124
Berkeley, Calif.	13	11	1	1	-	-	2
Fresno, Calif.	83	53	16	8	3	3	5
Glendale, Calif.	6	6	-	-	-	-	-
Honolulu, Hawaii	63	50	9	2	1	1	11
Long Beach, Calif.	88	63	15	6	1	2	15
Los Angeles Calif.	475	290	98	51	24	7	21
Oakland, Calif.	66	41	12	9	-	4	5
Pasadena, Calif.	32	22	6	1	1	2	2
Portland, Oreg.	141	81	34	17	5	4	4
Sacramento, Calif.	142	99	21	11	7	4	12
San Diego, Calif.	125	85	20	13	4	3	14
San Francisco, Calif.	152	81	31	32	4	4	3
San Jose, Calif.	167	109	38	12	4	4	16
Seattle, Wash.	159	85	29	32	9	4	3
Spokane, Wash.	66	46	9	7	-	4	7
Tacoma, Wash.	40	30	9	-	1	-	4
TOTAL	12,851††	8,377	2,549	1,125	386	402	624

*Mortality data in this table are voluntarily reported from 121 cities in the United states, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

§Data not available. Figures are estimates based on average of past available 4 weeks.

Renal Agenesis — Continued

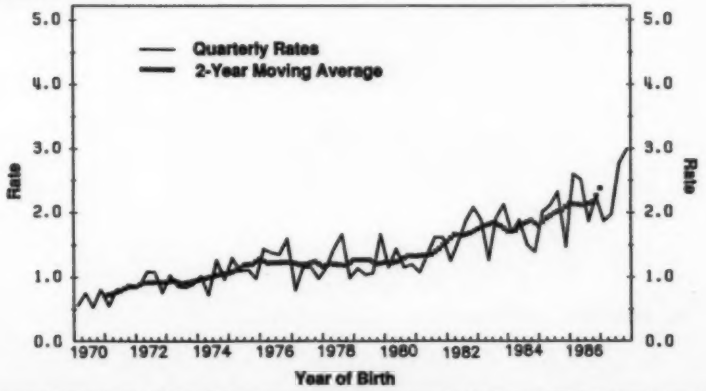
agenic and one dysgenic kidney remained constant; 3) the annual frequency of unilateral renal agenesis varied, although the number of infants with this diagnosis was small, and most cases were found incidentally during autopsy; and 4) the incidence of bilateral renal dysgenesis increased 10-fold from 0.03 per 10,000 births in 1970 to 0.33 per 10,000 births in 1983.

These findings suggest that the reported increase in kidney anomalies coded as 753.0 was not due primarily to increased incidence in renal agenesis but to increases in other renal anomalies, including renal dysgenesis. Because renal dysgenesis was not specifically listed under ICD code 753.0 before 1980, it may have been coded under cystic kidney disease (ICD 753.1). Consequently, to determine whether coding practice alone might account for the increase in renal dysgenesis, statistical data for cystic kidney disease were also examined. This examination revealed that before 1980, the reported prevalence of cystic kidney disease (753.1) was decreasing, while the reported prevalence of renal agenesis (753.0) increased. In addition, during 1980–1983, prevalence rates for both cystic kidney disease (753.1) and renal agenesis and dysgenesis (753.0) increased. Data from the BDMP surveillance system also suggest that since 1980, the prevalence of congenital ureteral obstruction, a condition often associated with polycystic kidneys, has increased. Hence, the apparent increase in renal dysgenesis appears to be independent of changes in ICD revisions and coding practices.

Although data on birth defects from the MDHIS are available only since 1982, prevalence rates of renal agenesis reported through this system from 1982 through 1987 have increased slightly (Figure 2). For this same time period, average annual prevalence of reported cases of renal agenesis per 10,000 births was similar for both BDMP components: CPHA (1.9) and MDHIS (1.6). Stillbirths in the CPHA data partly account for the slightly higher rate reported by this system.

Reported by: Birth Defects and Genetic Diseases Br, Div of Birth Defects and Developmental Disabilities, Center for Environmental Health and Injury Control, CDC.

FIGURE 1. Trends in reported incidence of kidney defects coded as ICD 753.0*, by quarter of birth — Birth Defects Monitoring Program/Commission on Professional and Hospital Activities, 1970–1987



*Rates per 10,000 total births. (Numerator and denominator include stillbirths and live births.)

Renal Agenesis — Continued

Editorial Note: The BDMP provides medical information on about 1.3 million newborns per year, or 35% of U.S. births. Hospital discharge abstracts on these newborns are coded by hospital medical records personnel and submitted regularly to CPHA or MDHIS for processing. The major difference between the two systems is that stillbirths are included in the CPHA data but not in the MDHIS data.

CDC analyzes 161 birth defect categories to identify unusual trends and geographic differences within the CPHA and MDHIS data (*1*). Defects are usually reported 3–6 months after an affected infant's birth, and the data are reviewed four times a year. Although these data sources are not population-based and are not a random sample of U.S. births, they nevertheless represent the largest single set of uniformly collected and coded discharge data on birth defects among newborns in the United States.

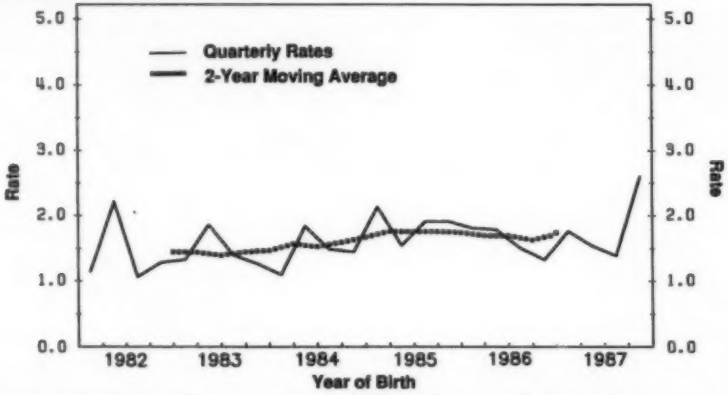
The number of cases of renal agenesis confirmed by clinical data appears to be relatively constant. However, the prevalence of a variety of other renal anomalies, including renal dysgenesis, although still rare, appears to be increasing. Renal anomalies, however, often occur along with other anomalies of the genital tract. Since renal dysgenesis may be a sentinel event, then an increase in this birth defect suggests that other, less severe genitourinary anomalies also may be increasing.

The BDMP will continue to monitor reports of renal agenesis and dysgenesis as well as other birth defects to detect changes in the prevalence of anomalies by geographic area. This monitoring will aid in identifying and eliminating causes of congenital malformations.

Reference

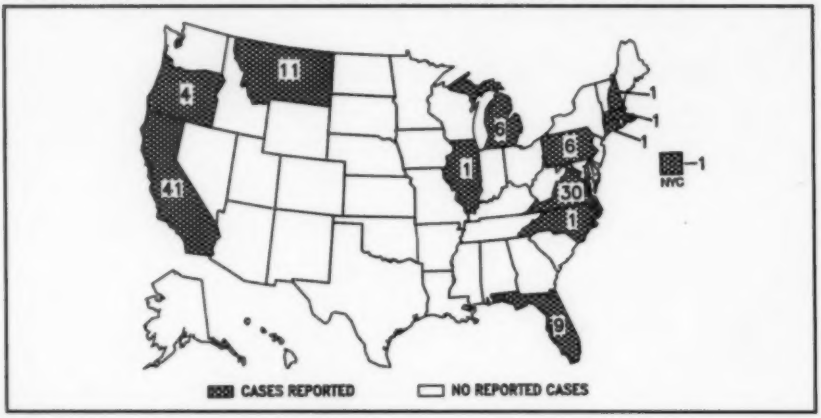
1. CDC. Congenital malformations surveillance, January 1982–December 1985. Atlanta: US Department of Health and Human Services, Public Health Service, March 1988.

FIGURE 2. Trends in reported incidence of kidney defects coded as ICD 753.0*, by quarter of birth — Birth Defects Monitoring Program/McDonnell Douglas Health Information System, 1982–1987



*Rates per 10,000 births. (Numerator and denominator include only live births.)

FIGURE I. Reported measles cases — United States, Weeks 40–43, 1988



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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